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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,295	02/26/2004	John W. Clapper JR.	21365	3436

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Peter N. Lalos
Stevens, Davis, Miller & Mosher, LLP
Suite 850
1615 L Street, NW
Washington, DC 20036-5622

EXAMINER

TORRES, ALICIA M

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,295

Applicant(s)

CLAPPER, JOHN W.

Examiner

Alicia M Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Heiple et al. '237, hereafter Heiple.

3. In regards to claim 1-4, 6, 7 and 16, Heiple discloses A grappling assembly for a machine having a boom, comprising:

a dipper stick (10) pivotally connectable to said boom (not shown);

an implement (11) pivotally connected to said dipper stick (10);

means (17) operatively interconnecting said dipper stick (10) and said implement (11) for pivoting said implement (11) relative to said dipper stick (10);

an arm member (30) connected to an underside of said dipper stick (10), pivotal between an operative position cooperable with said implement (11) for grappling objects between said arm member (30) and said implement (11) when said implement (11) is pivoted toward said arm member (30), and an inoperative position;

means (32) operatively interconnecting said dipper stick (10) and said arm member (30) for pivoting said arm member (30) between said operative and inoperative positions; and

means (53) for detachably latching said arm member (30) in said operative position including one of said dipper stick (10) and said arm member (30) having at least one recess (at

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41) and the other of said dipper stick (10) and said arm member (30) having a yieldably biased protuberance (60) receivable in said recess (41) when said arm member (30) is in said inoperative position, as per claim 1; and

wherein said means (32) for pivoting said arm member (30) is receivable within the envelope of said arm member (30) when said arm member (30) is in said inoperative position, as per claim 2; and

wherein said means (32) for pivoting said arm member (30) comprises a fluid actuated cylinder assembly, as per claim 3; and

wherein said protuberance (60) comprises a button (60a) having a curved outer surface receivable in said recess (at 41), and wherein said button (60a) is yieldingly biased in a projecting direction by a spring (56) seated in said one of said dipper stick (10) and said arm member, as per claim 4; and

wherein the biasing force exerted on said protuberance (60) is sufficient to yieldingly bias said protuberance (60) in said recess (at 41) registered therewith yet insufficient to retain said protuberance (60) therein upon operation of said means (32) for pivoting said arm member (30) from said inoperative position to said operative position, as per claim 6; and

wherein said arm member (30) is provided with a jagged surface (38) engageable with an object being grappled, as per claim 7; and

wherein said member (30) having said recess (at 41) includes an element (41) disposed in a plane perpendicular to the pivotal axis (at 35) of said arm member (30) and including said protuberance (60) biased in an extended position, engageable with said protuberance (60) in camming relation to cause said protuberance (60) to displace and then be inserted into said recess

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(at 41) when said arm member (30) is angularly displaced to said inoperative position, as per claim 16.

4. In regards to claims 8-11 and 13-15, Heiple discloses an assembly mountable on a dipper stick (10) of a machine having an implement (11) pivotally connected to said dipper stick (10) and means (17) operatively interconnecting said dipper stick (10) and said implement (11) for pivoting said implement (11) relative to said dipper stick (10), comprising:

an arm member (30) mountable on an underside of said dipper stick (10) for pivotal movement relative to said dipper stick (10);

means (32) for pivoting said arm member (30) between an inoperative position and an operative position cooperable with said implement (11) when said implement (11) is pivoted relative to said dipper stick (10) toward said arm member (30) to grapple objects between said implement (11) and said arm member (30);

and means (53) for detachably latching said arm member (30) in said inoperative position including a first member (41) mountable on one of said dipper stick (10) and said arm member (30) having at least one recess (at corner of 41 and 38, see figure 1) and a second member (54) mountable on the other of said dipper stick (10) and said arm member (30) having a yieldably biased protuberance (60) receivable in said recess (41) when said arm member (30) is in said inoperative position, as per claim 8; and

wherein said means (32) for pivoting said arm member (30) is receivable within the envelope of said arm member (30) when said arm member (30) is in said inoperative position, as per claim 9; and

wherein said means (32) for pivoting said arm member (30) comprises a fluid actuated cylinder assembly, as per claim 10; and

wherein said protuberance (60) comprises a button (60a) having a curved outer surface receivable in said recess (at 41), and wherein said button (60a) is yieldingly biased in a projecting direction by a spring (56) seated in said one of said dipper stick (10) and said arm member, as per claim 11; and

wherein the biasing force exerted on said protuberance (60) is sufficient to yieldingly bias said protuberance (60) into said recess (at 41) registered therewith yet insufficient to retain said protuberance (60) therein upon operation of said means (32) for pivoting said arm member (30) from said inoperative position to said operative position, as per claim 13; and

wherein said arm member (30) includes a pair of elongated, transversely spaced, plate members (33), and wherein said means (32) for pivoting said arm member (30) between an inoperative position and an operative position is received between said plate members (33) when said arm member (30) is in said inoperative position, as per claim 14; and

wherein said plate members (33) are provided with jagged surfaces (38) engageable with an object being gripped when said arm member (30) is in said operable position, as per claim 15.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heiple in view of Wilson.

The device is disclosed as applied above. Heiple further discloses wherein the latching means (53) includes a bracket (31) mounted on the underside of the dipper stick (10) having an outwardly, yieldingly biased protuberance (the hook portion of bracket 31), and a surface (41) on the arm member (30) provided with a recess (the unnumbered corner at which the surface 41 meets the arm 30) registerable with the protuberance (hook portion of bracket 31) when the arm member (30) is in the inoperative position, whereby the protuberance (hook of bracket 31) snap-fits into the recess (the unnumbered corner at which the surface 41 meets the arm 30) to displaceably retain the arm member (30) in the inoperative position, as per claim 5 and 12.

However, Heiple fails to disclose wherein the protuberance is a pair of protuberances and a plurality of recesses registerable with the pair of protuberances.

Wilson not only teaches the use of a pair of outwardly, yieldingly biased protuberances (54) and recesses (43) registerable with the protuberances (54) in order to securely retain parts of an excavation device, Wilson also teaches the specific structure of the latch of the instant invention as shown in the drawings but has yet to be claimed.

Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a pair of protuberances and a pair of recesses since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Response to Arguments

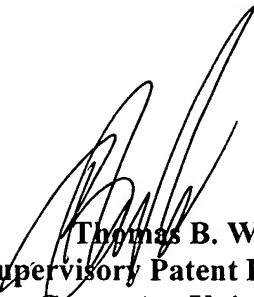
7. Applicant's arguments filed 28 October 2004 have been fully considered but they are not persuasive. In regards to Applicant's arguments that Heiple et al. fails to disclose a recess, a recess is defined as simply an indentation or cleft. The corner created at the joint of surface 41 and arm 30 creates an indentation, or recess, for which the bracket 31 is meant to engage. Applicant fails to claim any structure that would preclude the use of the Heiple reference.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-872-9306.


Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671